

REMARKS

This is in response to the Final Office Action mailed November 5, 2002. Claims 1 and 3-19 are pending.

Claims 1 and 3-19 stand rejected by the Examiner under 35 USC § 103(a), as being unpatentable over U.S. Patent No. 6,048,002 (Ohta) in view of U.S. Pat. No. 6,176,528 (Taga). The Examiner has stated:

Ohta discloses a door closer (103) comprising a latch (108) engaging an engagement member (4), and urging member (111) that urges the latch towards the initial position, a ratchet (110), an actuation mechanism (114, 116, 117, 118, 120 and 122), a motor (M) and a controller to control the motor (Figures 1, 13A-21 and Col. 10 Line 2 to Col. 21 Line 10).

However, Ohta fails to disclose that the latch mechanism includes a courtesy switch.

Taga teaches that is known in the art to have courtesy switch (85, 86 and 88) to detect the door is in a predetermined position separate from the release position in the door opening direction.

However, the rejection does not address the limitation contained in independent Claims 1, 11, 16 that the controller contains "a timer having a settable reference time for latching operations, which when exceeded causes said motor to run in an inverse direction to reverse the latching operation." This limitation was added to each of the independent Claims 1, 11 and 16 in the amendment of October 1, 2002, and is not taught by either the Ohta or the Taga references.

The purpose of the timer is described at page 18, line 11 – page 19, line 5 of the specification, as quoted below:

If the measured time is not more that a predetermined reference value, the control circuit 44 determines that the latching operation of the trunk door 2 has been normally completed. However, if the measured time exceeds the reference

value, the control circuit 44 determines that the latching operation of the trunk door 2 has been interfered. For example, if an object is clamped between the trunk door 2 and the body frame of the vehicle 1, the door close 3 cannot complete the latching operation. In this case, the measured time exceeds the reference value.

When determining that the latching operation of the trunk door 2 has been interfered, the control circuit 44 discontinues the latching operation of the door closer 3. The control circuit 44 then rotates the motor M in an inverse direction, or the negative direction. More specifically, by rotating the motor M in the negative direction, the control circuit 44 moves the connecting arm 17 to a limit position of FIG. 9 of the clockwise movement via the intermediate stop position of FIG. 10. The control circuit 44 then rotates the motor M in the positive direction to return the connecting arm 17 from the clockwise limit position to the open door initial position of FIG. 2. The control circuit 44 determines that the connecting arm 17 is located at the clockwise limit position when the first contact element 40 is switched from ON state to OFF state while the second contact element 41 is maintained in OFF state, or when the first detection signal SG1 is switched from the low level to the high level while the second detection signal SG2 is maintained at high level.

Neither the Ohta reference nor the Taga reference discloses such a timer, nor does either reference disclose solutions to the problem of interference of the latching operation of the trunk door. Therefore, we respectfully request that the Examiner withdraw his rejection.

Claims 3-10 and 17 are dependent on independent claim 1; claims 12-15 and 18 are dependent on independent claim 11; and claim 19 is dependent on independent claim 16; and are allowable for the reasons stated above with respect to the independent claims.

AMENDMENT AFTER FINAL

Application No. 09/938,280

In view of the foregoing, it is submitted that this application is in condition for allowance. Favorable consideration and prompt allowance of the application are respectfully requested.

The Examiner is invited to telephone the undersigned if the Examiner believes it would be useful to advance prosecution. The Commissioner is hereby authorized to charge any additional fees which may be due, or to credit any overpayment made, to Deposit Account No. 50-2522.

Respectfully submitted,



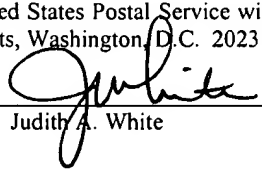
Julie A. Zavoral
Attorney for Applicant(s)
Registration No. 43,304

Customer No. 35110
Patterson, Thunte, Skaar & Christensen, LLC
2000 US Bank Center
777 East Wisconsin Avenue
Milwaukee, Wisconsin 53202-5345
Telephone: (414) 276-0977
Facsimile: (414) 276-0982

Please grant any extension of time necessary for entry; charge any fee due to Deposit Account No. 50-2522

CERTIFICATE OF MAILING

I hereby certify that this document is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Assistant Commissioner for Patents, Washington, D.C. 20231 on 5 February 2003



Judith A. White

ATTACHMENT
REDLINED AMENDMENT

Wherein deleted material is shown in **[bracketed]** format and new material is shown in underlined format as follows:

SPECIFICATION AS AMENDED

Please substitute the following amended paragraph(s) and/or section(s):

Page 5, Paragraph 4, bridging Page 6, Paragraph 1 (Twice Amended):

As shown in Figs. 2 to 4, the latch 8 includes an engagement portion 8d that engages with a coil spring 11, or an urging member. In the same manner, the first ratchet 10 includes an engagement portion 10a that engages with the coil spring 11. The coil spring 11 is thus suspended between the engagement portions 8d, 10a. The first ratchet **[8] 10** and latch **[10] 8** are urged toward each other through the coil spring 11.